Nova Scotia Department of Agriculture and Marketing

RP-85-125
Agdex # 410.821 03

Dairy Farms Five Year Summary

1980 - 1984

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NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

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INTRODUCTION

This report provides a summary of the business performance of Nova Scotia dairy farms over a five year period, 1980-1984 inclusive. Data used in the preparation of this summary was obtained from the Nova Scotia Dairy Farm Business Summaries prepared in each of the five years included in this report.

As noted in the Dairy Farm Business Summaries, the farms used were not selected on a random sample basis, but rather volunteered their information. Hence, care should be exercised in the interpretation and use of the results shown in this summary.

The main purpose of this summary is to provide basic information on the dairy industry, at the farm level, in Nova Scotia over a five year period. Trends in incomes, costs, net returns, efficiency and management factors are outlined.

We gratefully acknowledge the co-operation of the dairy producers whose business information has been used to prepare this summary. We further acknowledge the work of Debbie Freeman, Farm Management Technician who prepared the data for the summary, and Tracey Mitchell for the secretarial work.

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JULY 1985

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SECTION A

SUMMARY

SUMMARY

This report provides information on trends that have occured at the farm level in the Dairy Industry over the five year period, 1980-1984, inclusive. As noted earlier, the farms used to provide the basic data were not selected on a random sample basis. However, even with this noted limitation, the information contained in this summary can be used with care to provide useful trend data regarding the dairy industry in Nova Scotia.

The material is presented in the following manner - a brief summary of ratios, cost and return data, and management factors on a per farm, per cow and per hectolitre basis. The format used for presentation of information is similar to that used in the Annual Dairy Farm Business Summaries.

In reviewing information contained in Table A-1, a number of observations can be made. Gross Farm Income has increased in each of the five years with an overall increase of some 25 percent over the five year period. At the same time, costs have also increased 25 percent over this period. Net Farm Income has increased by 27 percent over the period.

Production per cow has shown a modest increase over the five years, with the change over the period being 1.5 percent. Production has grown from 5,434 litres in 1983 to 5,667 litres in 1984. Milk sold per man equivalent has decreased by 18 percent over the period.

In terms of prices received from milk, this figure has also changed over the period, from an average price of $35.61 per hectolitre in 1980 to $47.41 in 1984. This represents a change in percentage terms of 33 percent. While returns have been increasing, costs have been on the rise as well. The cost of producing a hectolitre of milk averaged $36.76 in 1980, while in 1984 this figure was $48.98 - for a percentage change of 33 percent. The net return to the farmer remained a negative - that is, the net cost was greater than the return. In 1984, the net return was -$1.58 per hectolitre.

The largest individual component of cost in producing milk is purchased dairy ration. On a per cow basis, this item has increased from $692.00 in 1980 to $770.00 in 1984, for a change of some 11 percent. On a per hectolitre of milk sold basis, the cost of feed increased by some $1.19 from $12.40 in 1980 to $13.59 in 1984.

Investment per cow has increased gradually over the period, with the change over the five year period being 43 percent.

Return to total invested capital shows an increase of 7 percent during the five year period.

Capital turnover has remained relatively unchanged over the five year period.

TABLE A-1: SUMMARY

ITEM	1980	1981	1982	1983	1984
Gross Farm Income	158,330	170,256	177,915	184,286	197,666
Total Farm Expenses	141,202	157,650	163,422	164,257	175,959
Net Farm Income	17,128	12,605	14,493	20,029	21,707
Labor & Management Income	7,424	841	1,121	9,216	9,548
# of Cows/Farm	65	65	63	61	64
Production/Cow (L)	5,583	5,445	5,518	5,434	5,667
Cows/Man Equivalent	29	26	25	23	23
Milk Sold/Man Equivalent (HL)	1,588	1,423	1,391	1,271	1,304
Receipts from Milk/HL	35.61	40.32	43.18	45.21	47.41
Cost of Producing Milk/HL	36.76	43.93	46.93	46.65	48.98
Net Return/HL	-1.15	-3.61	-3.75	-1.44	-1.58
Variable Cost as % of Total Cost	66	65	66	66	67
Fixed Cost as % of Total Cost	20	21	20	20	20
Opportunity Cost as % of Total Cost	14	14	14	14	13
Purchased Feed/Cow ($)	692	731	702	683	770
Feed Cost/HL Milk ($)	12.40	13.42	12.73	12.57	13.59
Feed Cost as % of Milk Sold (%)	37.3	35.2	29.5	27.8	28.7
Investment/Cow ($)	3,336	3,836	4,110	4,506	4,779
Return on Investment (%)	7.0	4.6	5.1	7.2	7.5
Capital Turnover (Yrs)	1.4	1.5	1.5	1.5	1.5

SECTION B

PER FARM ANALYSIS

INCOME

Total Farm Receipts increased from an average of $153,236. in 1980 to $203,179. in 1984, an increase of 33 percent.

Income from milk and milk subsidies accounted for 85 percent of Total Farm Receipts.

TABLE B-1: INCOME

ITEM	1980	1981	1982	1983	1984
Milk Sales	120,265	134,030	143,299	143,727	164,837
Milk Subsidy	9,008	7,679	6,912	6,081	7,190
Livestock Sales	13,196	11,905	12,793	13,308	14,140
Crop Sales	1,538	2,386	2,547	2,966	2,808
Miscellaneous	9,229	11,171	10,948	12,797	14,205
TOTAL FARM RECEIPTS	153,236	167,172	176,500	178,879	203,179

EXPENSES

Expenses on a per farm basis increased from an average of $122,147. in 1980 to $163,372. in 1984. This represents a change of some 34 percent in Cash Expenses. Purchased dairy feed, the largest single cost item accounted for 30 percent of Cash Expenses.

TABLE B-2: EXPENSES

ITEM	1980	1981	1982	1983	1984
Dairy Feed	44,904	47,161	44,272	41,637	49,299
Livestock Purchased	6,584	5,981	3,296	4,747	4,713
Milk Hauling	4,206	4,746	5,333	5,470	6,127
Crop Expenses	9,202	10,151	7,258	10,946	11,765
Tractor & Machinery	7,257	9,016	10,517	9,919	11,351
Truck & Auto	2,270	2,319	2,512	3,541	3,116
Interest	10,137	12,707	13,452	14,363	16,799
Labor	9,746	12,098	13,012	13,828	16,304
Taxes	685	809	897	1,051	1,233
Milk Marketing Costs	4,312	4,742	7,258	8,476	10,274
Dairy Supplies	2,811	3,270	3,676	3,801	4,089
Vet & Drugs	1,345	1,493	1,707	1,884	2,026
Breeding	1,337	1,599	1,587	1,913	2,152
Building & Fence Repairs	3,328	3,321	3,656	3,849	4,079
Utilities	3,923	3,979	4,433	4,529	5,053
Insurance	2,182	2,296	2,437	2,566	2,647
Miscellaneous	7,920	10,659	12,506	12,791	12,347
TOTAL CASH EXPENSES	122,147	136,347	142,477	145,311	163,372

INCOME SUMMARY

In reviewing different measures of income over the five (5) year period, it can be noted that the trend of increasing income carried through to these levels as well. Net Cash Income has increased by some 32 percent over the period from $30,089. in 1980 to $39,807. in 1984. Net Farm Income has also increased from $17,128. in 1980 to $21,761. in 1984, an increase of 27 percent.

Although Labor and Management Income showed a decrease in the two years following 1980, the 1984 value of $9,548. is an increase of 29 percent from the 1980 value of $7,424.00

TABLE B-3: INCOME SUMMARY

ITEM	1980	1981	1982	1983	1984
Total Farm Receipts	152,236	167,172	176,500	178,879	203,179
Total Cash Expenses	122,147	136,347	142,477	145,311	163,372
NET CASH INCOME	30,089	30,825	34,023	33,568	39,807
Plus: Inventory Change	5,094	3,084	1,415	5,407	2,606
Less: Depreciation	19,055	21,303	20,945	18,946	20,653
NET FARM INCOME	17,128	12,606	14,493	20,029	21,761
Less: Value of Unpaid Family Labor	652	454	588	509	556
Interest on Net Worth @ 10% (11% in 1981) (12% in 1982)	9,052	11,311	12,784	10,244	11,657
LABOR & MANAGEMENT INCOME	7,424	841	1,121	9,216	9,548

SECTION C

PER COW ANALYSIS

INCOME

When figures are calculated on a per cow basis, Total Farm Receipts have increased by 34 percent over the five (5) year period - from $2,362. in 1980 to $3,173. in 1984.

TABLE C-1: INCOME

ITEM	1980	1981	1982	1983	1984
Milk Sales	1,854	2,077	2,273	2,357	2,575
Milk Subsidy	139	119	110	100	112
Livestock Sales	203	184	203	218	221
Crop Sales	24	37	40	49	44
Miscellaneous	142	173	174	210	222
TOTAL FARM RECEIPTS	2,362	2,590	2,800	2,934	3,173

EXPENSES

Over the five (5) year period, Cash Expenses have increased from $1,883. per cow in 1980 to $2,552. in 1984 - a change of $669. per cow or some 36 percent.

TABLE C-2: EXPENSES

ITEM	1980	1981	1982	1983	1984
Dairy Feed	692	731	702	683	770
Livestock Purchased	101	93	52	78	74
Milk Hauling	65	74	85	90	96
Crop Expenses	142	157	189	180	184
Tractor & Machinery	112	140	167	163	177
Truck & Auto	35	36	40	58	49
Interest	156	197	213	236	262
Labor	150	187	206	227	255
Taxes	11	13	14	17	19
Milk Marketing Costs	66	73	115	139	160
Dairy Supplies	43	51	58	62	64
Vet & Drugs	21	23	27	31	32
Breeding	21	25	25	31	34
Building & Fence Repairs	51	51	58	63	64
Utilities	60	62	70	74	79
Insurance	34	36	39	42	41
Miscellaneous	122	165	198	210	193
TOTAL CASH EXPENSES	1,883	2,113	2,260	2,383	2,552

INCOME SUMMARY

Net Cash Income on a per cow basis has increased by $142. or by 30 percent over the period. Net Farm Income has increased by $76. per cow between 1980 and 1984. It will be noted that Net Farm Income dropped in 1981 from the 1980 level of $264., but shows an increase again in 1982. A similar trend occurred in Labor and Management Income - a decrease being observed in the two years following 1980, with the 1984 figure increasing by $28. per cow from 1980. An increase of 25 percent over the five (5) year period is noted. It should be noted that the 1984 Labor and Management Income per cow showed a decrease from the 1983 level of $152.00.

TABLE C-3: INCOME SUMMARY

ITEM	1980	1981	1982	1983	1984
Total Farm Receipts	2,362	2,590	2,800	2,934	3,173
Total Cash Expenses	1,883	2,113	2,260	2,383	2,552
NET CASH INCOME	479	477	540	551	621
Plus: Inventory Change	79	48	22	89	41
Less: Depreciation	294	330	332	311	323
NET FARM INCOME	264	195	230	329	340
Less: Value of Unpaid Family Labor	10	7	9	9	9
Interest on Net Worth @ 10% (11% in 1981) (12% in 1982)	140	175	203	168	182
LABOR & MANAGEMENT INCOME	114	13	18	152	142

SECTION D

PER 100 LITRES ANALYSIS

INCOME

Analysis of Total Farm Receipts on a per hectolitre of milk sold basis indicates that Farm Receipts have increased by $13.78 per hectolitre over the period. This translates to a change of 33 percent.

TABLE D-1: INCOME

ITEM	1980	1981	1982	1983	1984
Milk Sales	33.13	38.14	41.19	43.37	45.43
Milk Subsidy	2.48	2.19	1.99	1.84	1.98
Livestock Sales	3.64	3.39	3.68	4.02	3.90
Crop Sales	0.42	0.68	0.73	0.90	0.77
Miscellaneous	2.54	3.18	3.15	3.86	3.91
TOTAL FARM RECEIPTS	42.21	47.57	50.74	53.99	55.99

EXPENSES

Cash Expenses increased by $11.37 on a per hectolitre of milk sold basis over the five (5) year period. In percentage terms, this represents a change of 34 percent.

TABLE D-2: EXPENSES

ITEM	1980	1981	1982	1983	1984
Dairy Feed	12.37	13.42	12.73	12.57	13.59
Livestock Purchased	1.81	1.70	0.95	1.43	1.30
Milk Hauling	1.16	1.35	1.53	1.65	1.69
Crop Expenses	2.54	2.89	3.43	3.30	3.24
Tractor & Machinery	2.00	2.57	3.02	2.99	3.13
Truck & Auto	0.63	0.66	0.72	1.07	0.86
Interest	2.79	3.62	3.87	4.33	4.63
Labor	2.68	3.44	3.74	4.17	4.49
Taxes	0.19	0.23	0.26	0.32	0.34
Milk Marketing Costs	1.19	1.35	2.09	2.56	2.83
Dairy Supplies	0.77	0.93	1.06	1.15	1.13
Vet & Drugs	0.37	0.42	0.49	0.57	0.56
Breeding	0.37	0.46	0.46	0.58	0.59
Building & Fence Repairs	0.92	0.94	1.05	1.16	1.12
Utilities	1.08	1.13	1.27	1.37	1.39
Insurance	0.60	0.65	0.70	0.77	0.73
Miscellaneous	2.18	3.03	3.60	3.86	3.40
TOTAL CASH EXPENSES	33.65	38.80	40.96	43.86	45.02

INCOME SUMMARY

An analysis of income on a per hectolitre of milk sold basis reveals Net Cash Income increased by $2.41 over the five (5) year period. Net Farm Income also shows an increase of $1.28 per hectolitre over the five (5) year period.

Labor and Management Income showed a slight increase of $0.59 per hectolitre over the period.

TABLE D-3: INCOME SUMMARY

ITEM	1980	1981	1982	1983	1984
Total Farm Receipts	42.21	47.57	50.74	53.99	55.99
Total Cash Expenses	33.65	38.80	40.96	43.86	45.02
NET CASH INCOME	8.56	8.77	9.78	10.13	10.97
Plus: Inventory Change	1.40	0.88	0.41	1.63	0.72
Less: Depreciation	5.25	6.06	6.02	5.72	5.69
NET FARM INCOME	4.72	3.59	4.17	6.05	6.00
Less: Value of Unpaid Family Labor	0.18	0.13	0.17	0.17	0.15
Interest on Net Worth @ 10% (11% in 1981) (12% in 1982)	2.49	3.22	3.68	3.09	3.21
LABOR & MANAGEMENT INCOME	2.05	0.24	0.32	2.79	2.64